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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/605,735	06/29/2000	Do-hyoung Kim	Q59911	8093
23373	7590	05/28/2004		
SUGHRUE MION, PLLC 2100 PENNSYLVANIA AVENUE, N.W. SUITE 800 WASHINGTON, DC 20037				
			EXAMINER FERRIS, DERRICK W	
			ART UNIT 2663	PAPER NUMBER 10

DATE MAILED: 05/28/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/605,735

Applicant(s)

KIM ET AL.

Examiner

Derrick W. Ferris

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 5,6 and 8-11 is/are allowed.
- 6) ☒ Claim(s) 1-4,7 and 12-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 June 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. **Claims 1-16** as amended are still in consideration for this application. Applicant has added claims **12-16**.
2. Examiner **withdraws** the anticipated rejection to *Bell* for Office action filed 11/10/03. In particular, the rejection is withdrawn because the reference does not disclose checking whether or not the other digital device (i.e., the first device 310), which manages the point-to-point connection, is not the other digital device to be connected by the original/first point-to-point connection. However, the *Bell* reference anticipates the newly added claims since the above-limitation is not recited.
3. Examiner **withdraws** the anticipated rejection to *Zou* for Office action filed 11/10/03. The rejection is withdrawn because the *Zou* rejection rejects only claim 11 and claim 11 is a dependent claim thus the independent claim 8 from which claim 11 depends is not addressed. In other words, the rejection is withdrawn based on the merits of the rejection and not necessarily what the reference teaches.
4. Examiner **withdraws** the obviousness rejection to *Zou* in view of *Bell* for Office action filed 11/10/03. The rejection is withdrawn because the base claims should have been rejected to *Bell* in view of *Zou* since *Bell* is used to reject the parent claims (i.e., the rejection was improper).

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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6. **Claims 1-4, 7, and 12** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As to **claim 1**, “the other digital device” at line 6 lacks antecedent basis. Claims 2-4 depend on claim 1 and are thus also rejected. Please fix by either placing “other digital device” in the preamble or amending the limitation to recite “an other digital device”.

As to **claim 2**, “the other point-to-point connection” at line 2 lacks antecedent basis. Please change to “the another point-to-point connection”.

As to **claim 3**, “the other point-to-point connection” at line 2 lacks antecedent basis. Please change to “the another point-to-point connection”. Also “the original point-to-point connection” at line 3 lacks antecedent basis (examiner recommends replacing the term “the point-to-point connection” with “the original point-to-point connection” in all the claims), “the two digital devices” at line 3 lacks antecedent basis (please change to “the other digital device and another digital device”), and “the originally-established point-to-point connection” at line 4 lacks antecedent basis.

As to **claim 7**, “the digital” at line 4 lacks antecedent basis. Please change to “the digital device”.

As to **claim 12**, “the other point-to-point connection” at line 1 lacks antecedent basis. Please change to “the another point-to-point connection”.

7. **Claims 13-16** are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential steps, such omission amounting to a gap between the steps. See MPEP § 2172.01. The omitted steps are: when the second device 320 (i.e., the first digital device) and

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the third device 220 (i.e., a second digital device) determine that the first device 210 (i.e., the connection establishing device), which manages the connection, is not the *other digital device* to be connected by this point-to-point connection, they establish a point-to-point connection to each other and overlay the existing connection with the new connection. In particular, see page 4, lines 16-31 of applicant's specification. Applicant provides no other motivation for establishing a second connection. Claims 14-16 are rejected because they depend on claim 13. Examiner assumes for the following rejections that establishing a connection would have been obvious in order to overcome the 112-second paragraph rejection.

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

9. **Claim 13** is rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 6,011,781 A to *Bell et al.* ("*Bell*").

As to **claim 13**, see at least figure 1 of Bell. For example, step (a) is shown connecting N2 to N1 to N3 where N1 is between N2 and N3. Second connections are also establishes, see e.g., the further connections between N2 and N3. Another example is further taught with respect to figure 6 and column 5, lines 9-34.

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. **Claims 14-16** are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,011,781 A to *Bell et al.* ("*Bell*") in view of U.S. Patent No. 6,452,935 B1 to *Gibbs et al.* ("*Gibbs*").

In making a proper obviousness rejection under MPEP 706.02(j), the examiner will address the following four steps:

- a) the relevant teachings of the prior art relied upon, preferably with reference to the relevant column or page number(s) and line numbers where appropriate;*
- b) the difference of differences in the claim(s) over the applied cited references;*
- c) the proposed modification of the applied reference(s) necessary to arrive at the claimed subject matter; and*
- d) an explanation why one skilled in the art at the time of the invention was made would have been motivated to make the proposed modification.*

As such to **claim 14**, for step (a) *Bell* discloses that devices can have more than one point-to-point connection, see e.g., column 1, lines 20-30.

For step (b) *Bell* is silent or deficient to the further limitation wherein the establishing the first point-to-point connection comprises the connection-establishing device writing values to a register of the first digital device and to a register of the second digital device.

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Gibbs teaches the further recited limitation above at e.g., column 6, line 45 to column 7, line 7.

For step (c), the proposed modification of the above-applied reference(s) necessary to arrive at the claimed subject matter would be to modify *Bell* by clarifying that point-to-point connects are made using IEEE 1394 serial communications protocol and in particular supporting the IEEE-61883 standard.

In order to establish a prima facie case of obviousness for step (d), three basic criteria must be met. The three criteria according to MPEP 706.02(j) are as follows:

First there must be some suggestion or modification, either in the reference(s) themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine the reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations.

As such, for step (d) examiner notes that it would have been obvious to one skilled in the art prior to applicant's invention to include the further limitation wherein the establishing the first point-to-point connection comprises the connection-establishing device writing values to a register of the first digital device and to a register of the second digital device. In particular, the motivation for modifying the reference or to combine the reference teachings would be using a plug to identify a stream. In particular, *Bell* cures the above-cited deficiency by providing a motivation found at e.g., column 6, line 58 – column 7, line 7. Second, there would be a reasonable expectation of success since such “plugs” are supported by the IEEE-61883 standard. Thus the references either in singular or in combination teach the above claim limitation(s).

As to **claims 15-16**, see e.g., column 7, lines 1-7 of *Gibbs*.

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Allowable Subject Matter

12. **Claims 1-4, 7, and 12** would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action.

13. **Claims 5-6 and 8-11** are allowed.

The following is an examiner's statement of reasons for allowance:

14. **Claims 5-6 and 8-11** are allowable over the prior art of record because the Examiner found neither prior art cited in its entirety, nor based on the prior art, found any motivation to combine any of the said prior art references which teaches establishing a second point-to-point connection when the results of checking whether or not the digital device, which establishes the point-to-point connection, is the other digital device to be connected by the original point-to-point connection is not the other digital device to be connected by the original point-to-point connection and that is consistent with the motivation and teaching found in applicant's specification. Examiner notes that closest cited prior art to *Murakoshi* does teach performing a check on a specific hop count which includes one terminal node and one other node (see column 7, lines 40-41), however, *Murakoshi* teaches removing a node and not establishing a new connection to recover from the restriction, see e.g., column 8, lines 12-20.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

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Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Derrick W. Ferris whose telephone number is (703) 305-4225.


The examiner can normally be reached on M-F 9 A.M. - 4:30 P.M. E.S.T.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chau Nguyen can be reached on (703) 308-5340. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Derrick W. Ferris
Examiner
Art Unit 2663

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